

UNIT 6-1. Prime Time

1. Building on Factors and Multiples
2. Common Multiples and Common Factors
3. Factorizations: Searching for Factor Strings
4. Linking Multiplication and Addition: The Distributive Property

UNIT 6-2. Comparing Bits and Pieces

1. Making Comparisons
2. Connecting Ratio and Rates
3. Extending the Number Line
4. Working with Percents

UNIT 6-3. Let's Be Rational

1. Extending Addition and Subtraction of Fractions
2. Building on Multiplication With Fractions
3. Dividing With Fractions
4. Wrapping up the Operations

UNIT 6-4. Covering and Surrounding

1. Extending and Building on Area and Perimeter
2. Measuring Triangles
3. Measuring Parallelograms
4. Measuring Surface Area and Volume

UNIT 6-5. Decimal Ops

1. Decimal Operations and Estimation
2. Adding and Subtracting Decimals
3. Multiplying and Dividing Decimals
4. Using Percents

UNIT 6-6. Variables and Patterns

1. Variables, Tables, and Graphs
2. Analyzing Relationships Among Variables
3. Relating Variables With Equations
4. Expressions, Equations, and Inequalities

UNIT 6-7. Data About Us

1. What's in a Name? Organizing, Representing, and Describing Data
2. Who's in Your Household? Using the Mean
3. Variation on a Theme: Measuring Variability
4. What Numbers Describe Us? Using Graphs to Group Data

UNIT 7-1. Shapes and Designs

1. The Family of Polygons
2. Designing Polygons: The Angle Connection

3. Designing Triangles and Quadrilaterals

UNIT 7-2. Accentuate the Negative

1. Extending the Number System
2. Adding and Subtracting Rational Numbers
3. Multiplying and Dividing Rational Numbers
4. Properties of Operations

UNIT 7-3. Stretching and Shrinking

1. Enlarging and Reducing Shapes
2. Similar Figures
3. Scaling Perimeter and Area
4. Similarity and Ratios

UNIT 7-4. Comparing and Scaling

1. Ways of Comparing: Ratios and Proportions
2. Comparing and Scaling Rates
3. Markups, Mark Downs, and Measures: Using Ratios, Percents, and Proportions

UNIT 7-5. Moving Straight Ahead

1. Walking Rates: Exploring Linear Relationships
2. Linear Relationships: Using Graphs, Tables, and Equations
3. Solving Equations
4. Exploring Slope: Connecting Rates and Ratios

UNIT 7-6. What Do You Expect?

1. A First Look At Chance
2. Experimental and Theoretical Probability
3. Making Decisions With Probability
4. Analyzing Compound Events Using an Area Model
5. Binomial Outcomes

UNIT 7-7. Filling and Wrapping

1. Building Smart Boxes: Rectangular Prisms
2. Polygonal Prisms
3. Area and Circumference of Circles
4. Cylinders, Cones, and Spheres

UNIT 7-8. Samples and Populations

1. Making Sense of Variability: Working With Samples
2. Choosing Samples From Populations
3. Using Samples to Make Predictions About Populations

UNIT 8-1. Thinking With Mathematical Models

1. Exploring Data Patterns
2. Linear Models and Equations
3. Inverse Variation

4. Variability and Associations in Numerical Data
5. Variability and Associations in Categorical Data

UNIT 8-2. Looking for Pythagoras

1. Coordinate Grids
2. Squaring Off
3. The Pythagorean Theorem
4. Using the Pythagorean Theorem: Understanding Real Numbers
5. Using the Pythagorean Theorem: Analyzing Triangles and Circles

UNIT 8-3. Growing, Growing, Growing

1. Exponential Growth
2. Examining Growth Patterns
3. Growth Factors and Growth Rates
4. Exponential Decay
5. Patterns with Exponents

UNIT 8-4. Frogs, Fleas, and Painted Cubes

1. Introduction to Quadratic Functions
2. Quadratic Expressions
3. Quadratic Patterns of Change
4. Frogs Meet Fleas on a Cube

UNIT 8-5. Butterflies, Pinwheels, and Wallpaper

1. Symmetry and Transformations
2. Transformations and Congruence
3. Transforming Coordinates
4. Dilations and Similar Figures

UNIT 8-6. Say It With Symbols

1. Equivalent Expressions
2. Generating Expressions
3. Solving Equations
4. Looking Back at Functions
5. Reasoning With Symbols

UNIT 8-7. It's In the System

1. Linear Equations With Two Variables
2. Solving Linear Systems Algebraically
3. Systems of Functions and Inequalities
4. Systems of Linear Inequalities

UNIT 8-8. Function Junction

1. Families of Functions
2. Arithmetic and Geometric Sequences
3. Transforming Graphs, Expressions, and Functions
4. Completing the Square, the Quadratic Formula, & Complex Numbers

5. Polynomial Expressions, Functions, and Equations